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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,676	07/08/2005	Dirk Reissenweber	2923-717	4121
6449 7590 05/20/2010 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
EXAMINER				
ROLLAND, ALEX A				
ART UNIT		PAPER NUMBER		
1712				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/541,676

Applicant(s)

REISSENWEBER, DIRK

Examiner

ALEX ROLLAND

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-29 and 31-51 is/are pending in the application.
- 4a) Of the above claim(s) 19-28, 37, 38 and 41-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29, 31-36, 39, 40 and 47-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Claims 19-28, 37-38, 41-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/22/08.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 29, 33-34, 39-40, 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2850999 to Kaplan et al in view of US 5919517 to Levendusky et al in further view of US 4402778 to Goldsworthy.

Kaplan teaches a method for making coated, embossed metal sheets (col. 1, lines 15-19) from rust resistant metals such as aluminum (col. 1, line 22) used for decorative or structural purposes (col. 1, lines 17-19). The coating is applied onto the metal sheet as an initial treatment, followed by embossing of the coated sheet, before other secondary operations (col. 2, lines 55-60). The coating can be selected from varnishes (col. 3, line 73) which inherently provide a protective quality and adheres to the aluminum. The embossing operation comprises the sheets being passed through matched hard steel embossing rolls (claimed "embossing unit") in order to form a multitude of small bosses (col. 4, lines 56-70). Kaplan does not teach that the secondary operation is extrusion coating with plastic or that dimensionally stability is provided. However, Levendusky teaches a method for coating a metal strip, in particular aluminum, on one or both sides (col. 1, lines 1-21) with thermoplastic resins from extruders and extrusion dies (col. 1, lines 7-16) useful for automobiles, appliance, and construction applications (abstract). Additionally, Goldsworthy teaches a method for continuous production of a reinforced laminate (abstract) wherein metallic sheets are laminated with fiber-containing reinforced plastic useful in construction applications (col. 1, lines 58-64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the method of Kaplan and incorporate the method of

Levendusky as a secondary operation for depositing the material of Goldsworthy because Levendusky states that coating metal with plastic improves corrosion resistance, formability, and appearance (col. 19-22) and Goldsworthy states that fiber-containing plastic results in a laminate having lower cost than other, similar construction materials (col. 1, lines 58-64).

Claim 48:

The fibers are glass fibers (Goldsworthy, col. 9, lines 15-36).

Claims 49-50:

These properties are assumed to be inherent to the references cited as identical materials deposited in the same fashion are expected to have the same properties.

Claim 51:

The fiber-reinforced layer has a thickness between 15 and 65 mils (.381 to 1.651 mm) (Goldsworthy, col. 26, lines 21-29). In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

5. Claims 31, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2850999 to Kaplan et al and US 5919517 to Levendusky et al in further view of US 4402778 to Goldsworthy in further view of US 4253597 to Waffner et al.

Kaplan, Levendusky, and Goldsworthy are discussed above but fail to teach passing the aluminum through a loop-like arrangement after embossing and before extrusion coating. However, Waffner teaches that it has long been known that the feeding of web material, such as fragile sheeting, from an input to an output is best accomplished by permitting a loose loop to form in the web between the inlet and the outlet (col. 1, lines 5-11). With such a loop, the web will not be damaged if there are changes in the relative infeed and outfeed speeds of the web (col. 1, lines 10-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the method of Kaplan, Levendusky, and Goldsworthy and include a loose loop between embossing and extrusion coating because Waffner states that it is desirable to do so for a fragile web to prevent damage.

6. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2850999 to Kaplan et al in view of US 5919517 to Levendusky et al in further view of US 4402778 to Goldsworthy in further view of US 6555615 to Van Rheene.

Kaplan, Levendusky, and Goldsworthy are discussed above but fail to teach an additional removable plastic layer. However, Van Rheene teaches a removable coating that protects a substrate from foreign objects, weathering, and pollutants (col. 3-4, lines 66-2). The substrate can be selected from various metals or coated metals (col. 1, lines

16-18) and is useful for various applications such as the manufacture of vehicles and building materials (col. 1, lines 36-40). Regarding the ease of removal, see Table VI (col. 17, lines 9-38) where various polymers are tested for ease of removal from aluminum. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to practice the method of Kaplan, Levendusky, and Goldsworthy and incorporate the removable, protective film of Van Rheene because Van Rheene states that a protective film of this type protects the substrate from damage.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2850999 to Kaplan et al in view of US 5919517 to Levendusky et al in further view of US 4402778 to Goldsworthy in further view of US 4253597 to Waffner et al in further view of US 1856928 to Pannier.

Kaplan, Levendusky, Goldsworthy and Waffner are discussed above but fail to teach the upper layer stopping during the embossing process. However, Pannier teaches a stamping method for embossing a metal sheet (col. 1, lines 1-4) wherein a pair of embossing dies (claimed "upper stamp" and "lower stamp") are used to emboss metal sheets (col. 1, lines 17-28) by bringing the sheet between the dies, operating upon the sheet (claimed "stopped during embossing"), then shifting the sheet (col. 3, lines 59-65). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the embossed rollers of Kaplan, Levendusky, Goldsworthy and Waffner with the embossing dies of Pannier because Pannier states that such embossing dies are suitable for embossing metal.

Response to Arguments

8. Applicant's arguments, filed 2/17/10, with respect to the rejection(s) of claim(s) under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of claim amendments and further search.

9. Regarding Pannier, the majority of the references used in the present rejection and in particular Kaplan utilize embossing rolls in order to emboss the substrate. This is presumably desirable in order to provide embossing in a continuous manner.

Regardless, Kaplan is silent as to the "stopped during embossing" feature of claim 36. Pannier is incorporated into the rejection to show that embossing dies are a suitable alternative to the embossing rolls of Kaplan and the use of such embossing dies requires stopping the substrate during embossing presumably to prevent undesirable stretching or breaking of the substrate. The motivation to combine is the substitution of one known, equivalent element (the embossing rollers) with another (the embossing dies) to obtain predictable results.

Conclusion

10. No Claims are allowed. All pending claims are rejected for the reasons set forth above.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX ROLLAND whose telephone number is (571)270-5355. The examiner can normally be reached on Monday through Friday, 9:00 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frederick J. Parker/
Primary Examiner, Art Unit 1715

/ALEX ROLLAND/
Examiner, Art Unit 1792